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Claims

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- 1. A method for positioning a measuring device (20) which emits and receives optical radiation to measure wear in the lining of a container (10), said method involving fixing coordinate systems (26, 36) for the measuring device (20) and the container (10) by combining that coordinate systems, and individually determining the positions of a plurality of specific fixing marks (41, 43, 45) in the coordinate system (26) of the measuring device (20), wherein each of said fixing marks (41, 43, 45) is substantially regular in shape, wherein the position of the fixing marks (41, 43, 45) are determined by:
 - (a) deflecting an optical radiation beam across a first fixing mark (41) in first and second intersecting directions and determining the position of the center and least two linear edges thereof and creating a first temporary coordinate system (47) based on the position of the center and the directions of the at least two edges thereof.
 - (b) searching, based on the first temporary coordinate system (47), at least two further fixing marks (43, 45) and determining the position of the centers thereof,
 - (c) defining, based on the center positions of said fixing marks (41, 43, 45), the coordinate system (36) of the container (10).
- 2. The method of Claim 1, wherein the first fixing mark (41) is substantially rectangular in shape.
- 3. The method according to any of Claims 1 or 2 wherein the first fixing mark (41) is larger in size than the at least two further fixing marks (43, 45).
- 4. The method of any of the proceeding claims, wherein the center of the fixing

marks (41, 43, 45) is calculated from the intersections thereof.

- 5. The method according Claim 4, wherein the intersections are detected by one of distance measuring and reflection intensity measuring.
- 6. The method according to Claim 5, wherein the fixing marks (41, 43, 45) comprise a retro-reflective surface.